

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number  
**WO 2005/049063 A3**

(51) International Patent Classification<sup>7</sup>: **A61K 38/17, C12N 5/10, A01K 67/027, G01N 33/50, C12Q 1/68, A61P 3/00**

(21) International Application Number:  
**PCT/EP2004/013175**

(22) International Filing Date:  
**19 November 2004 (19.11.2004)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
**03026614.2 19 November 2003 (19.11.2003) EP**

(71) Applicant (*for all designated States except US*): **DEVEL- OGEN AKTIENGESELLSCHAFT FÜR ENTWICK- LUNGSBIOLOGISCHE FORSCHUNG [DE/DE]; Rudolf-Wissell-Str. 28, 37079 Göttingen (DE).**

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **ONICHTCHOUK, Daria [RU/DE]; Auf der Lieth 10, 37077 Göttingen (DE).**

(74) Agent: **WEICKMANN & WEICKMANN; Postfach 860 820, 81635 München (DE).**

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): **AE, AG, AL, AM,**

**AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

**Declaration under Rule 4.17:**

— *of inventorship (Rule 4.17(iv)) for US only*

**Published:**

— *with international search report*

(88) Date of publication of the international search report:  
**17 November 2005**

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**WO 2005/049063 A3**

(54) Title: **USE OF SECRETED PROTEIN PRODUCTS FOR PREVENTING AND TREATING PANCREATIC DISEASES AND/OR OBESITY AND/OR METABOLIC SYNDROME**

(57) Abstract: The present invention discloses proteins secreted by the developing pancreas, and polynucleotides, which identify and encode these proteins. The invention also relates to the use of these sequences in the diagnosis, study, prevention, and treatment of pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome.